p1028b: Combine Like Terms (v16)

Example

Combine like terms.

$$-9x + 6x^2 + 2 - 2x^2 - 6x^2 + 7 + 5 + 9x + x - 7x$$

Answer

Combine the quadratic terms.

$$6x^2 - 2x^2 - 6x^2 \equiv -2x^2$$

Combine the linear terms.

$$-9x + 9x + x - 7x \equiv -6x$$

Combine the constant terms.

$$2 + 7 + 5 \equiv 14$$

The final result:

$$-2x^2 - 6x + 14$$

Question 1

Combine like terms.

$$-2x^2 + 2x^2 + 9 + 5x^2 - 9x + 8 - x + 7x - 4 - 7$$

$$5x^2 - 3x + 6$$

Question 2

Combine like terms.

$$-7 + 6 - 8x^2 + 2x^2 - 6x + 4x^2 + 8x + 9x - 9 - 5x^2$$

$$-7x^2 + 11x - 10$$

Question 3

Combine like terms.

$$-x + x + 2x - 6 + 8x^2 - 8x^2 - 9 + 7x^2 - 3 + 6$$

$$7x^2 + 2x - 12$$

Question 4

Combine like terms.

$$-3x^2 - 7 + 3x^2 + 5 - 5x + x + 2x - 9x^2 - 1 - 8x$$

$$-9x^2 - 10x - 3$$